

JIL TALKOVSKY GELLER, Ph.D., P.E.

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EDUCATION

Ph.D. in Environmental Engineering, University of California, Berkeley, 1990. Dissertation:
Dissolution of Non-aqueous Phase Organic Liquids in Porous Media

M.S. in Civil Engineering, University of California, Berkeley, 1984.

B.S. in Civil Engineering, Technion, Israel Institute of Technology, Haifa, Israel, 1981.

PROFESSIONAL EXPERIENCE

- 1992 – present Earth Sciences Division, Lawrence Berkeley National Laboratory, Berkeley California
- 1999 – present Principal Scientific Engineering Associate
- 2004 – present Ecology Department: Responsible for the design and operation of bioreactors in unique configurations for anaerobic microorganisms. Work contributes to understanding the ability of microorganisms to respond to and survive external stresses, as related to the bioremediation needs of subsurface contamination by heavy metals and radionuclides.
- 2005 – 2007 Earth Sciences Division Safety Coordinator
- 1992 – 2004 Geophysics Department: Laboratory investigations pertaining to (1) the integration of geophysical and hydrological measurements to characterize contamination in the shallow subsurface and (2) multiphase flow in fractured rock
- 1995 – 1999 Geologic Scientist
- 1992 – 1994 Postdoctoral Fellow
- 1983 – 1991 University of California, Civil/Environmental Engineering, Berkeley
- 1991 Lecturer: Introduction to Environmental Engineering, Chemistry of Waters
- 1985 – 1990 Graduate Research Assistant: Experimental investigation of organic contaminant transport in groundwater and remediation
- 1983 – 1984 Teaching Assistant: Introduction to Sanitary Engineering
- 1980 – 1983 Engineer: Project engineering for industrial water and wastewater treatment facilities, Bechtel Group of Companies, San Francisco, California

PROFESSIONAL ACTIVITIES

Registered Civil Engineer in the State of California

Member, American Geophysical Union, American Society for Microbiology

Reviewer for: Water Resources Research, Journal of Contaminant Hydrology, Environmental Science and Technology, Geophysical Research Letters

Board of Directors, Science Exploration Camp, Inc., 1994-1998

HONORS AND AWARDS

Editor's Highlight, for Ajo-Franklin, Geller and Harris, Geophys. Res. Lett. 34, L07404, American Geophysical Union, 2007.

Outstanding Performance Award, E. O. Lawrence Berkeley National Laboratory, 2006.

Outstanding Performance Award, E. O. Lawrence Berkeley National Laboratory, 2000.

2000 Editor's Citation for Excellence in Refereeing for Water Resources Research.

Best Poster Award, Great Plains/Rocky Mountain Hazardous Substance Research Center, 1998 Conference on Hazardous Waste Research, Snowbird, Utah.

Spot Recognition Award for Daughters to Work Day Workshop, 1997.

Engineering Science Inc. and the Association of Environmental Engineering Professors Doctoral Thesis Award, 1991.

Chancellor's Patent Fund for Graduate Student Research, University of California at Berkeley, 1987-1988.

University of California Regents Fellowship, 1985-1986.

Distinguished Teaching Assistant, Dept. of Civil Engineering, University of California at Berkeley, 1984.

Chevron Fellowship, 1983-1984.

B.S., cum laude, Technion, Israel, 1981.

SPECIAL TRAINING

Biofilms: Challenging Paradigms, American Society for Microbiology, 2-day workshop and lab, Northeastern University, Boston, MA, May 31-June 1, 2008.

JMP Software: Statistical Data Exploration, and ANOVA and Regression, SAS training, January 14-16, 2008, San Francisco, CA.

Microbial Fermentation: Development and Scale-Up, Hands-On Training Program, Center for Integrated BioSystems, Utah State University, Logan, UT, October 18-21, 2005.

LABORATORY RESEARCH SUPERVISION

J. B. Ajo-Franklin, Using High Resolution Borehole Geophysics for DNAPL Detection and Environmental Site Characterization, Ph.D. Thesis, Department of Geophysics, Stanford University, Stanford, CA, 2005.

G. Su, Flow Dynamics and Solute Transport in Unsaturated Rock Fractures, Ph.D. Thesis, Department of Civil Engineering, University of California, Berkeley, 1999.

P. K. Seifert, Effects of Pore Fluids in the Subsurface on Ultrasonic Wave Propagation, Ph.D. Thesis, Department of Geology and Geophysics, University of California, Berkeley, 1998.

J. Jarsjö, Groundwater degassing and unsaturated transmissivity in fractured rock, in Hydraulic Conductivity Relations in Soil and Fractured Rock: Fluid Component and Phase Interaction Effects, Ph.D. Thesis, Department of Civil and Environmental Engineering, Royal Institute of Technology, Stockholm, 1998.

FUNDED PROPOSALS

LDRD Exploratory Research on Seismic Imaging of Organic Liquid Contaminants in Unconsolidated Media, with L. R. Myer, 90K, 1992-1993.

AFOSR Geophysical Imaging of NAPL Contamination in Unconsolidated Porous Media, with D. Vasco and L R. Myer, 135K, 1996-1998.

AFOSR Characterization and Remediation Strategies for Unconsolidated Aquifers, with C. M. Oldenburg and C. Doughty, 300K, 1996-1998.

EM/ER Processes Controlling the Migration and Biodegradation of Non-aqueous Phase Liquids (NAPLs) within Fractured Rocks in the Vadose Zone, with K. Pruess, J. C. Hunter-Cevera, H-Y. Holman and M. S. Conrad, 1,125K, 1996-1999.

EM50 – Subsurface Contaminants Focus Area, Mapping DNAPL Transport and Contamination in Fractured Rock and Sedimentary Aquifers with High Resolution Borehole Seismic Imaging, with E. L. Majer, 1,107K, FY2001-2003.

Publications

1. R. Han, **J. T. Geller**, L. Yang, E. L. Brodie, R. Chakraborty, J. T. Larsen, H. R. Beller, Physiological and transcriptional studies of Cr(VI) reduction under aerobic and denitrifying conditions by an aquifer-derived pseudomonad, *Environ. Sci. Technol.*, 2010, 44 (19), pp 7491-7497.

2. Han, B-G, M. Dong, H. Liuc, L. Camp, **J. Geller**, M. Singer, T. C. Hazen, M. Choi, H. E. Witkowskac, D. A. Ball, D. Typke, K. H. Downing, M. Shatsky, S. E. Brennere, J-M. Chandonia, M. D. Biggin, R. M. Glaeser, Survey of large protein complexes in *D. vulgaris* reveals great structural diversity, revision submitted to Proceedings of the National Academy of Sciences, July, 2009.
3. Knight, R., L. Pyrake-Nolte, L. Salter, E. Atekwana, A. Endres, **J. Geller**, D. Lesmes, S. Nakagawa, A. Revel, M. Sharma, C. Straley, Geophysics at the interface: the response of geophysical properties to solid-fluid, fluid-fluid and solid-solid interfaces, revision submitted to Reviews of Geophysics, January, 2009.
4. A. Mukhopadhyay, A. M. Redding, M. P. Joachimiak, A. P. Arkin, S. E. Borglin, P. S. Dehal, R. Chakraborty, **J. T. Geller**, T. C. Hazen, Q. He, D. C. Joyner, V. J. J. Martin1, J. D. Wall ,Z. Koo Yang, J. Zhou, J. D. Keasling, Cell wide responses to low oxygen exposure in *Desulfovibrio vulgaris* Hildenborough, J. Bacteriol. doi:10.1128/JB.00368-07
5. Ajo-Franklin, J. B., **J. T. Geller**, and J. M Harris (2007), Ultrasonic properties of granular media saturated with DNAPL/water mixtures, *Geophys. Res. Lett.*, 34, L07404, doi:10.1029/2006GL029200.
6. Ajo-Franklin, B., **J. T. Geller** and J. M. Harris , A Survey Of The Geophysical Properties Of Dense Chlorinated Solvents, LBNL-56061, Journal of Applied Geophysics, Vol. 59, No.3, pp. 177-189, July 2006.
7. T.P.A. Ferre, A. Binley, **J. Geller**, E. Hill, T Illangasekare, Hydrogeophysical Methods at the Laboratory Scale, In "Hydrogeophysics," Y. Rubin and S. Hubbard, Editors, Water Science and Technology Library, Volume 50, Springer, Dordrecht, the Netherlands, 2005.
8. Ajo-Franklin, B., **J. T. Geller** and J. M. Harris, The Dielectric Properties of Granular Media Saturated with DNAPL/Water Mixtures, *Geophysical Research Letters*, REPORT NUMBER: LBNL-55982, *Geophysical Research Letters*, 31(L17501, doi:10.1029/2004GL020672, September, 2004.
9. Su, G., **J.T. Geller**, J.R. Hunt, and K. Pruess, Small-scale features of gravity-driven flow in unsaturated fractures. *Vadose Zone Journal*, 3:592-601, 2004. Berkeley Lab Report LBNL-50691, 2002.
10. **Geller, J. T.**, E. L. Majer, J. E. Peterson, K. H. Williams, and S. Flexser, Mapping DNAPL Transport and Contamination in Sedimentary and Fractured Rock Aquifers with High Resolution Borehole Seismic Imaging, FY01 Annual Report, LBNL Report 49385, Lawrence Berkeley National Laboratory, Berkeley, CA 94720, December, 2001.
11. **Geller, J. T.**, S. E. Borglin, B. A Faybishenko, Experiments and Evaluation of Chaotic Behavior of Dripping Water in Fracture Models, LBNL Report 48394, Lawrence Berkeley National Laboratory, Berkeley, CA 94720, June, 2001.
12. Su, G. W., **J. T. Geller**, K. Pruess, and J. R. Hunt, Solute Transport Along Preferential Flow Paths in Unsaturated Fractures, *Water Resources Research*, Vol. 37(10),2481-2491, October, 2001.
13. B. Faybishenko, P.A. Witherspoon, C.Doughty, **J.T. Geller**, T.R. Wood, and R.K. Podgorne, Multi-Scale Investigations of Liquid Flow in a Fractured Basalt Vadose Zone, In "Flow and Transport Through Unsaturated Fractured Rock," D.D. Evans, T.J. Nicholson, and T.C. Rasmussen, Editors, *Geophysical Monograph* 42, Second Edition, pp. 161-182, 2001.
14. **Geller, J. T.**, M. B. Kowalsky, P. K. Seifert and K. T. Nihei, Acoustic Detection of Immiscible Liquids in Sand, *Geophysical Research Letters*, Vol. 27(3), 417-420, 2000. Berkeley Lab Report LBNL-42791, 1999.
15. **Geller, J. T.**, H-Y. Holman, G. Su, M. S. Conrad, K. Pruess and J. C. Hunter-Cevera, Flow dynamics and potential for biodegradation of organic contaminants in fractured rock vadose zone, *Journal of Contaminant Hydrology*, 43(1), pp. 63-90, 2000, Berkeley Lab Report LBNL -52587
16. Su, G., **J. T. Geller**, K. Pruess, F. Wen, Experimental studies of water seepage and intermittent flow in unsaturated, rough-walled fractures, *Water Resources Research*, Vol. 35(4), 1019-1038, 1999.
17. **Geller, J. T.**, Laboratory Studies of Groundwater Degassing in Replicas of Natural Fractured Rock for Linear Flow Geometry, LBNL Report 41386, February, 1998.
18. **Geller, J. T.**, G. Su, H-Y. Holman, M. Conrad, T-S. Liou, K. Pruess and J. C. Hunter-Cevera, Processes Controlling the Migration and Biodegradation of Non-aqueous Phase Liquids (NAPLs) within Fractured Rocks in the Vadose Zone. FY97 Annual Report, LBNL Report 41387, February, 1998.
19. Seifert, P. K., **J. T. Geller** and L. R. Johnson, Effect of P-wave scattering on velocity and attenuation in unconsolidated sand saturated with immiscible liquids, *Geophysics*, 63(1), 161-170, 1998.
20. **Geller, J. T.**, G. Su, H-Y. Holman, M. Conrad, K. Pruess and J. C. Hunter-Cevera, Processes Controlling the Migration and Biodegradation of Non-aqueous Phase Liquids (NAPLs) within Fractured Rocks in the Vadose Zone. FY96 Annual Report, LBNL Report 39996, February, 1997.
21. **Geller, J. T.**, G. Su and K. Pruess, Preliminary Studies of Water Seepage through Rough-Walled Fractures, LBNL Report 38810, July, 1996.

22. Jarsjö, J. and **J. T. Geller**, Groundwater degassing: laboratory experiments in rock fracture replicas with radial flow, Åspö Hard Rock Laboratory Progress Report HRL-96-12, SKB, Stockholm, Sweden, April 1996.
23. **Geller, J. T.** and L. R. Myer, Ultrasonic imaging of organic liquid contaminants in unconsolidated porous media, *Journal of Contaminant Hydrology*, 19(3), 1995.
24. **Geller, J. T.** and J. Jarsjö, *Groundwater Degassing and Two-Phase Flow Pilot Hole Test Report*, LBL Report 37004, 1995.
25. **Geller, J. T.**, C. Doughty, R. J. Glass and J.C.S. Long, *Disturbed Zone Effects: Two-phase flow in regionally water-saturated fractured rock*, LBNL Report 36848, 1995.
26. **Geller, J. T.** and J. R. Hunt, Mass transfer from non-aqueous phase organic liquids in water-saturated porous media, *Water Resources Research*, Vol. 29, No. 4, pp. 833-845, 1993.
27. **Geller, J. T.**, *Dissolution of Non-aqueous Phase Organic Liquids in Porous Media*, Ph.D. Dissertation, Department of Civil Engineering, University of California, Berkeley, California, 1990.

Manuscripts

1. **J. T. Geller**, D. C. Joyner, E. L. Brodie, Johann Gagnon-Bartsch and T. C. Hazen, High-throughput Assessment of Amendments in Uranium- and Nitrate-contaminated Groundwater and Soil, in preparation.

Abstracts and Conference Proceedings

1. R. Han, **J. T. Geller**, E. L. Brodie, R. Chakraborty, L. Yang, J. Larsen, H. R. Beller; Physiological and Transcriptional Studies of Cr(VI) Reduction by *Desulfovibrio vulgaris* Strain RCH1 Under Sulfate-Reducing Conditions, 110th General Meeting of the American Society for Microbiology, New Orleans, LA, May 21-24, 2011.
2. Gorur, A., C. M. Leung, A. Tauscher, D. Jorgens, S. Reveco, J. Remis, B. Lam, **J. T. Geller**, T. C. Hazen, T. Juba, S. Chhabra, J. Wall, M. Biggin, K. H. Downing, M. Auer¹, High Throughput Subcellular Protein Expression and Localization Studies in the Anaerobic Sulfate Reducer *Desulfovibrio vulgaris*, 110th General Meeting of the American Society for Microbiology, New Orleans, LA, May 21-24, 2011.
3. **Geller, J. T.**, H. Woo, D. C. Joyner, S. Kendall, T. C. Hazen, Microfluidic Studies of Nitrate Stress on *Shewanella oneidensis* Biofilms, 110th General Meeting of the American Society for Microbiology, New Orleans, LA, May 21-24, 2011.
4. Walian, P. J. , S. Allen, L. Zeng, E. Szakal, S. C. Hall, S. J. Fisher, R. Santos, B. Lam, **J. T. Geller**, T. C. Hazen, J. M. Chandonia, H. E. Witkowska, M. D. Biggin, B. K. Jap, High-throughput Pipeline for the Purification and Identification of *Desulfovibrio vulgaris* Membrane Protein Complexes, 110th General Meeting of the American Society for Microbiology, New Orleans, LA, May 21-24, 2011.
5. Chandonia, J-M., M. Dong, M. Shatsky, H. Liu, S. E. Brenner, L. Yang, T. C. Hazen, **J. T. Geller**, M. Choi, E. D. Szakal, J., H. E. Witkowska, A. P. Arkin, M. D. Biggin, Accurate, High-Throughput Identification of Stable Protein Complexes Using a Tagless Strategy, 110th General Meeting of the American Society for Microbiology, New Orleans, LA, May 21-24, 2011.
6. Chhabra, S., B. Gold, N. L. Liu, S. Reveco, T. R. Juba, J. D. Wall, B. R. Lam, **J. T. Geller**, T. C. Hazen, M. Choi, M. D. Biggin, E. D. Szakal, S. Allen, H. Witkowska, J-M. Chandonia, G. P. Butland, Engineering *Desulfovibrio vulgaris* Hildenborough for High Throughput Tandem Affinity Purification of Protein Complexes, 110th General Meeting of the American Society for Microbiology, New Orleans, LA, May 21-24, 2011.
7. Hazen, T. C., B. Faybushenko*, H. Beller, E. Brodie, E. Sonnenthal, C. Steefel, J. Larsen, M. Conrad, M. Bell, J. Christensen, S. Brown, D. Joyner, S. Borglin, **J. Geller**, R. Chakraborty, P. Nico, P. Long, D. Newcomer, and E. Arntzen. Contributed. Comparison of Field Groundwater Biostimulation Experiments Using Polylactate and Lactate Solutions at the Chromium Contaminated Hanford 100-H Site. June 27, 2011, Reno, NV. The International Symposium on Bioremediation and Sustainable Environmental Technologies.
8. Walian, P. J., S. Allen, L. Zeng, E. D. Szakal, H. Liu, S. C. Hall, S. J. Fisher, R. Santos, B. Lam, **J. T. Geller**, T. C. Hazen, J.-M. Chandonia, H. E. Witkowska, M. D. Biggin, and B. K. Jap. Invited. High-Throughput Pipeline for the Purification and Identification of *Desulfovibrio vulgaris* Membrane Protein Complexes. April 10-13, 2011, Crystal City, VA. Joint Meeting 2011 Genomic Science Awardee Meeting IX and USDA-DOE Plant Feedstock Genomics for Bioenergy Awardee Meeting, U. S. Department of Energy.
9. Chandonia, J.-M., M. Dong, M. Shatsky, H. Liu, L. Yang, T. C. Hazen, **J. T. Geller**, M. Choi, E. D. Szakal, S. Allen, S. E. Brenner, S. C. Hall, S. J. Fisher, S. Kumar, F. L. Poole, M. Adams, J. Jin, H. E. Witkowska, A. P. Arkin, and M. D. Biggin. Invited. Accurate, High-Throughput Identification of Stable Protein Complexes in *Desulfovibrio vulgaris* using a Tagless Strategy. April 10-13, 2011, Crystal City, VA. Joint Meeting 2011

Genomic Science Awardee Meeting IX and USDA-DOE Plant Feedstock Genomics for Bioenergy Awardee Meeting, U. S. Department of Energy.

10. Butland, G. P., S. R. Chhabra, B. Gold, N. L. Liu, S. Reveco, T. R. Juba, J. D. Wall, B. R. Lam, **J. T. Geller**, T. C. Hazen, M. Choi, M. D. Biggin, E. D. Szakal, S. Allen, H. Liu, H. E. Witkowska, and J.-M. Chandonia. Invited. High Throughput Identification of Protein Complexes from *Desulfovibrio vulgaris* by a Tandem Affinity Purification Pipeline. April 10-13, 2011, Crystal City, VA. Joint Meeting 2011 Genomic Science Awardee Meeting IX and USDA-DOE Plant Feedstock Genomics for Bioenergy Awardee Meeting, U. S. Department of Energy.
11. Gorur, A., C. M. Leung, S. Chhabra, T. Juba, A. Tauscher, S. Reveco, J. P. Remis, B. Lam, **J. T. Geller**, T. C. Hazen, M. Biggin, J. M. Chandonia, K. H. Downing, J. Wall, and M. Auer. Invited. Subcellular Localization of Proteins in the Anaerobic Sulfate Reducer *Desulfovibrio vulgaris* via SNAP-Tag Labeling and Photoconversion. April 10-13, 2011, Crystal City, VA. Joint Meeting 2011 Genomic Science Awardee Meeting IX and USDA-DOE Plant Feedstock Genomics for Bioenergy Awardee Meeting, U. S. Department of Energy.
12. Gorur, A., C. M. Leung, D. Jorgens, A. Tauscher, J. P. Remis, D. A. Ball, S. Chhabra, V. Fok, **J. T. Geller**, M. Singer, T. C. Hazen, T. Juba, D. Elias, J. Wall, M. Biggin, K. H. Downing, and M. Auer. 2010. Subcellular localization of proteins in the anaerobic sulfate reducer *Desulfovibrio vulgaris* via SNAP-tag labeling and photoconversion. Microscopy & Microanalysis 16:864-865. LBNL-xxxx
13. Knight, R., L. J. Pyrak-Nolte, L. Slater, E. Atekwana, A. Endres, **J. Geller**, D. Lesmes, S. Nakagawa, A. Revil, M. M. Sharma, C. Straley, Geophysics at the interface: Response of geophysical properties to solid-fluid, fluid-fluid, and solid-solid interfaces, REVIEWS OF GEOPHYSICS, VOL. 48, RG4002, 30 PP., 2010, doi:10.1029/2007RG000242
14. S. Borglin, **J. Geller**, R. Chakraborty, T. Hazen, O. Mason; Development of Extraction Techniques for the Detection of Signature Lipids from Oil, 110th General Meeting of the American Society for Microbiology, San Diego, CA, May 23-27, 2010, ISBN:978-1-5581-623-0, Abstract N-2765
15. M. Dong, B-G. Han, H. Liu, J. Malik, **J. T. Geller**, L. Yang, M. Choi, J-M. Chandonia, P. Arbelaez, H. J. Sterling, D. Typke, M. Shatsky, S. Brenner, S. Fisher, E. R. Williams, E. D. Szakal, S. Allen, S. C. Hall, T. C. Hazen, H. E. Witkowska, J. Jin, R. M. Glaeser, M. D. Biggin, Tagless Protein Complex Identification: A Novel High Throughput Strategy to Purify Protein Complexes and Identify Them by Mass Spectrometry, 110th General Meeting of the American Society for Microbiology, San Diego, CA, May 23-27, 2010, ISBN:978-1-5581-623-0, Abstract Q-2352
16. **J. T. Geller**, S. E. Borglin, J. L. Fortney, B. R. Lam, T. C. Hazen, M. D. Biggin Large-Scale, Continuous-Flow Production of Stressed Biomass (*Desulfovibrio vulgaris* Hildenborough), 110th General Meeting of the American Society for Microbiology, San Diego, CA, May 23-27, 2010, ISBN:978-1-5581-623-0, Abstract I-3057
17. R. Han, E. Brodie, S. Brown, R. Chakraborty, J. Christensen, **J. Geller**, H. R. Beller; Physiological, Isotopic, and Transcriptional Studies of Cr(VI) Reduction Under Aerobic and Denitrifying Conditions by an Aquifer-Derived Pseudomonad, 110th General Meeting of the American Society for Microbiology, San Diego, CA, May 23-27, 2010, ISBN:978-1-5581-623-0, Abstract Q-2337
18. M. P. Joachimiak, R. Chakraborty, A. Zhou, J. L. Fortney, **J. T. Geller**, J. Wall, J. Zhou, A. P. Arkin, T. C. Hazen, J. D. Keasling, S. R. Chhabra; Revisiting modes of energy generation in sulfate reducing bacteria, 110th General Meeting of the American Society for Microbiology, San Diego, CA, May 23-27, 2010, ISBN:978-1-5581-623-0, Abstract K-283.
19. Hazen, T. C., B. Faybushenko, H. Beller, E. Brodie, S. S. Hubbard, J. Peterson, E. Sonnenthal, C. Steefel, L. Yang, J. Larsen, M. Conrad, J. Christensen, S. Brown, D. Joyner, S. Borglin, **J. Geller**, R. Chakraborty, P. Nico, T. Tokunaga, J. Wan, M. Firestone, P. Long, D. Newcomer, and L. N'Guessan. Invited. Field-Scale Investigations of Cryptic Growth and Memory Response Hypotheses at the Chromium Contaminated Hanford 100-H Site. April 2009, Lansdowne, VA. 4th Annual DOE-ERSP PI Meeting.
20. Dong, M., M. Daly, H. Liu, S. Allen, E. Szakal, S. C. Hall, S. J. Fisher, T. C. Hazen, **J. T. Geller**, M. E. Singer, L. L. Yang, J. Jin, H. E. Witkowska*, and M. D. Biggin. Invited. Analysis of an Intact Dissimilatory Sulfite Reductase Protein Complex from *Desulfovibrio vulgaris* using an Ion Mobility QTOF Analyzer. February 2009, Bethesda, MD. Genomics:GTL Contractor-Grantee Workshop VII, USDA-DOE Plant Feedstock Genomics for Bioenergy Awardee Workshop 2009.
21. Liu, H., L. Yang, N. Khainovski, M. Dong, E. D. Szakal, M. Choi, S. Allen, T. C. Hazen, **J. T. Geller**, M. E. Singer, P. Walian, B. Jap, S. C. Hall, S. J. Fisher, H. E. Witkowska, J. Jin, and M. D. Biggin. Invited. Protein Complex Analysis Project (PCAP): Introduction of Iterative MS/MS Acquisition (IMMA) to the MALDI LC MS/MS Workflow To Enable High Throughput Protein Complex Identification using Tagless Strategy. February 2009, Bethesda, MD. Genomics:GTL Contractor-Grantee Workshop VII, USDA-DOE Plant Feedstock Genomics for Bioenergy Awardee Workshop 2009.

22. Hazen, T. C., G. Anderson, S. Borglin, E. Brodie, S. van Dien, M. Fields, J. Fortney, **J. Geller**, E. Hendrickson, K. L Hillesland, H.-Y. Holman, J. Leigh, T. Lie, J. Jacobsen, D. Joyner, R Chakraborty, M. Keller, A. Mukhopadhyay, C. Schadt, D. Stahl, S. Stolyar, C. Walker, J. Wall, Z. Yang, H.-C. B. Yen, G. Zane, and J. Zhou. Invited. Applied Environmental Microbiology Core Research on Stress Response Pathways in Metal-Reducers VIMSS:ESPP. February 2009, Bethesda, MD. Genomics:GTL Contractor-Grantee Workshop VII, USDA-DOE Plant Feedstock Genomics for Bioenergy Awardee Workshop 2009.
23. Hazen, T. C., H.-Y. Holman, J. Keasling, A. Mukhopadhyay, S. Chhabra, **J. T. Geller**, M. Singer, D. Joyner, L. Camp, T. Torok, J. Wall, D. Elias, and M. D. Biggin. Invited. Protein Complex Analysis Project (PCAP): High Throughput Identification and Structural Characterization of Multi-Protein Complexes during Stress Response in Desulfovibrio vulgaris: Microbiology Subproject. February 2009, Bethesda, MD. Genomics:GTL Contractor-Grantee Workshop VII, USDA-DOE Plant Feedstock Genomics for Bioenergy Awardee Workshop 2009.
24. **J. T. Geller**, S. E. Borglin, L. E. Camp, R. Chakraborty, J. L. Fortney, M. E. Singer, M. L. Shelby, T. Torok, T. C. Hazen; Application of Custom-Designed Fermentors for Extremophilic Microorganisms, in proceedings for the American Society for Microbiology, 108th General Meeting, Boston, MA, June 1-5, 2008.
25. D. C. Joyner, C. B. Walker, R. Chakraborty, J. L. Fortney, **J. T. Geller**, L. E. Camp, A. Zhou, Z. He, M. P. Joachimiak, S. Stolyar, J. Zhou, D. A. Stahl, A. P. Arkin, T. C. Hazen; Characterization of Stress Response in a Sulfate Reducer/Methanogen Coculture, in proceedings for the American Society for Microbiology, 108th General Meeting, Boston, MA, June 1-5, 2008.
26. M. Dong, H. Liu, M. Choi, T. C. Hazen, **J. Geller**, M. Singer, L. Camp, S. Allen, S. J. Fisher, S. C. Hall, E. D. Szakal, H. Witkowska, L. Yang, J. Jin, M. D. Biggin; Tagless Protein Complex Identification: A Novel High Throughput Strategy to Purify Protein Complexes and Identify Them by Mass Spectrometry, in proceedings for the American Society for Microbiology, 108th General Meeting, Boston, MA, June 1-5, 2008.
27. B-G. Han, D. Typke, M. Dong, R. Walton, T. C. Hazen, **J. Geller**, M. Singer, M. D. Biggin, R. M. Glaeser, Initial Structural Survey of Multi-Protein Complexes of Desulfovibrio vulgaris by Electron Microscopy, in proceedings for the American Society for Microbiology, 108th General Meeting, Boston, MA, June 1-5, 2008.
28. Dong*, M., M. Daly, H. Liu, S. Allen, E. Szakal, S. C. Hall, S. J. Fisher, L. L. Yang, J. Dearnley, T. C. Hazen, **J. T. Geller**, M. E. Singer, J. Jin, M. D. Biggin, B. Jap, H. E. Witkowska. Contributed. Analysis of an Intact Dissimilatory Sulfite Reductase Protein Complex from Desulfovibrio vulgaris using an Ion Mobility QTOF Analyzer. June 2008, Denver, CO. Annual Meeting ASMS Conference on Mass Spectrometry.
29. Allen*, S., P. J. Walian, E. Szakal, H. Liu, M. Dong, E. Johansen, L. L. Yang, S. C. Hall, S. J. Fisher, T. C. Hazen, **J. T. Geller**, M. E. Singer, J. Jin, M. D. Biggin, B. Jap, H. E. Witkowska. Contributed. Toward the Development of a "Tagless" Method for the Isolation and Identification of Membrane Complexes in Desulfovibrio vulgaris Hildenborough. June 2008, Denver, CO. Annual Meeting ASMS Conference on Mass Spectrometry.
30. Liu*, H., M. Dong, L. L. Yang, S. Allen, P. J. Walian, E. Johansen, S. C. Hall, S. J. Fisher, T. C. Hazen, **J. T. Geller**, M. E. Singer, J. Jin, M. D. Biggin, B. Jap, H. E. Witkowska. Contributed. iTRAQ™ Reagent-Based "Tagless" Strategy of Identification and Purification of Soluble Protein Complexes in Bacteria: Development of High-Throughput Protocols. June 2008, Denver, CO. Annual Meeting ASMS Conference on Mass Spectrometry.
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Special Presentations

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